Jan. 21, 1930. C. R. DE LAUBENFELS 1,744,450

WEATHER STRIP

Filed March 28, 1928

Fig. 2.

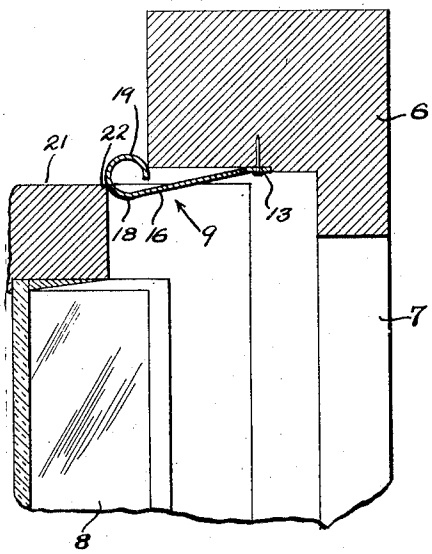


Fig. 1.

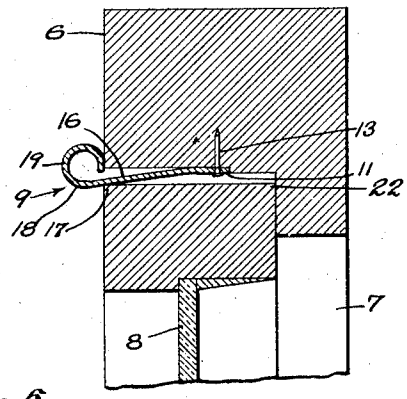


Fig. 5.

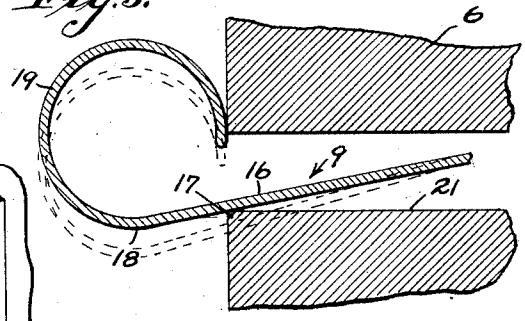


Fig. 3.

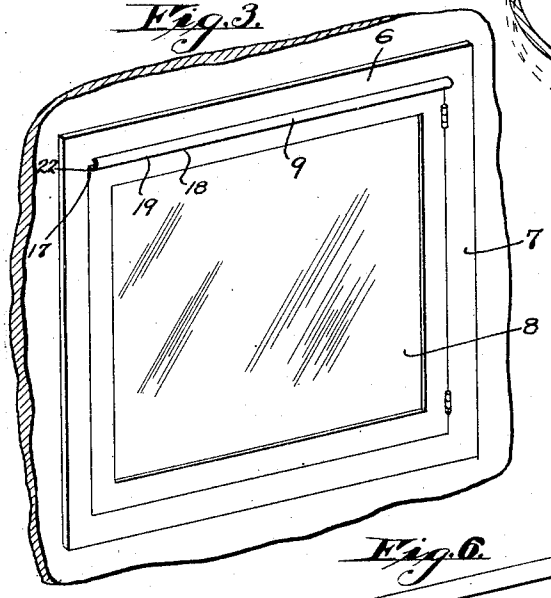


Fig. 4.

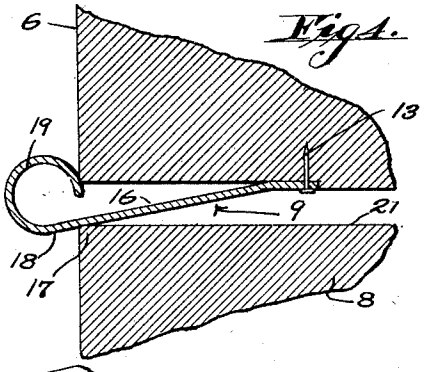


Fig. 6.



Inventor
C. R. de Laubenfels
By Hazard and Miller
Attorneys

Patented Jan. 21, 1930 1,744,450

UNITED STATES PATENT OFFICE

CLARENCE R. DE LAUBENFELS, OF LOS ANGELES, CALIFORNIA

WEATHER STRIP

Application filed March 28, 1928. Serial No. 265,252.

This invention relates to improvements in weatherstrips, and more especially to weatherstrips adapted for use with hinged closures such as French or casement windows, doors, hinged skylights, and the like.

An object of the invention is to provide an improved weatherstrip adapted to form a novel and simple weatherproof joint between a closure and the associated casement when the closure is swung to closing position.

A further object is to provide a weatherstrip especially adaptable for use on the top portion of the casement to provide a seal between it and the top of the associated closure.

A further object of the invention is to provide an improved weatherstrip which is of especial simple construction, and which may easily and quickly be constructed and applied, and which is capable of efficiently performing the service required of it.

With the foregoing and other objects in view which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Figure 1 is a cross sectional view of a portion of a casement window and the top of the casement therefor, and the weatherstrip in sealing position therebetween.

Fig. 2 is a view similar to Fig. 1, with the window moved from closed position.

Fig. 3 is a perspective view of the window and casing showing the weatherstrip as viewed from the outside of the window.

Fig. 4 is an enlarged, fragmentary view showing the weatherstrip in sealing position.

Fig. 5 is an enlarged, diagrammatic view showing the weatherstrip in sealing position, and indicating in dotted lines the position of the weatherstrip when released.

Fig. 6 is a perspective view of a portion of the weatherstrip.

In terms of broad inclusion, the weatherstrip of the present invention comprises a strip of resilient material adapted to be secured along one edge to the casing of a swinging closure. The body of the strip is bent from adjacent the attached edge toward the closure in the direction of opening of said closure, to be engaged thereby, preferably by the outer corner of the closure when in closed position. The unattached edge of the strip is curled back upon itself to provide an inclined portion against which the closing closure may impinge to spring the weatherstrip sufficiently to allow the closure to close. The curled portion also acts as a gutter to lead water away from the top of the closure in the event that the weatherstrip is applied to the top of the casement.

In greater detail, the preferred embodiment of the weatherstrip of the present invention is shown applied to the top rail 6 of a window casement 7 within which the casement window 8 is hingedly mounted.

The strip which is indicated in its entirety at 9, is preferably formed of suitable resilient, non-corrosive material such as strip brass or bronze. Any means for attaching the strip to the casement may be employed. In its preferred form, the strip is composed of such light material that a plurality of nails 13 may be driven through the strip into the casement 7 to securely hold the strip in operative position.

The body portion 16 of the strip 9 is deflected downwards from the attached edge 11 toward the window 8 in the direction of opening thereof. The strip 9 is of such width that when the window 8 is in closed position, it extends a short distance beyond and below the upper outer corner 17 of the window 8, as clearly shown in Figs. 1 and 4. Beyond the point 18 which is beyond and below the corner 17, the unattached edge is curled backwards to provide a gutter 19 extending across the top of the window 8.

It is to be understood that the natural resiliency of the metal of which the strip is composed, is such that when the window 8 is open, the point 18 on the strip 9 will be below the top surface 21 of the window 8 as shown in Fig. 2 and as indicated in dotted lines in Fig. 5. Thus as the window 8 is moved to closing position, the upper inner corner 22 thereof, will impinge upon the outer side of the curled gutter 19 to force it upwards and permit the window 8 to move to a closing posi-

tion. Consequently, when the window is fully closed, the resiliency of the metal will cause the strip 9 to press tightly against the upper outer corner 17 of the window to provide an effective seal against the passage of wind or water between the top rail 6 of the casing and the window 8.

The point 18 of the strip, as pointed out previously, will be positioned slightly below the top of the window 8, so as to preclude the possibility of water flowing under the strip 9 onto the top surface 21 of the window 8 by capillary attraction.

The gutter 19 serves to entrap any water which might be flowing down the sides of the structure in which the casing 7 is mounted, above the window 8, and lead such water to the sides of the window to discharge it.

It may be readily understood that I have thus provided an improved type of weatherstrip which is not only capable of operating very efficiently to provide a seal between the edges of a window and the associated casing, but which is also very simple and durable in structure, which is very inexpensive to manufacture, and which may be easily and quickly installed.

Various changes in the details of construction may be made without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. A weatherstrip for establishing a seal between a hingedly mounted closure and its casing, and comprising a resilient strip secured along one edge to said casing, said strip being deflected from adjacent its attached edge toward the closure in the direction of the opening of said closure to be engaged thereby and to extend beyond the corner thereof when closed.

2. A weatherstrip for establishing a seal between a hingedly mounted closure and its casing, and comprising a resilient strip secured along one edge to the top of said casing, said strip being deflected downwards from its attached edge in the direction of opening of the closure to be engaged by the outer corner thereof when closed.

3. A weatherstrip for establishing a seal between a hingedly mounted closure and its casing, and comprising a resilient strip secured along one edge to the top of said casing, said strip being deflected downwards from its attached edge in the direction of opening of the closure to be engaged thereby and to extend beyond and below the outer corner thereof when closed.

4. A weatherstrip for establishing a seal between a hingedly mounted closure and its casing, and comprising a resilient strip secured along one edge to the top of said casing, said strip being deflected downwards from its attached edge in the direction of opening of the closure to be engaged thereby and to extend beyond and below the outer corner thereof when closed, and the unattached edge of the strip being curled upwards to provide a gutter.

5. A weatherstrip comprising a resilient strip bent to provide a fastening edge extending longitudinally thereof and a body portion inclined downward from said fastening edge, the outer edge of said body portion being curled upward to provide a gutter.

In testimony whereof I have signed my name to this specification.

CLARENCE R. DE LAUBENFELS.